

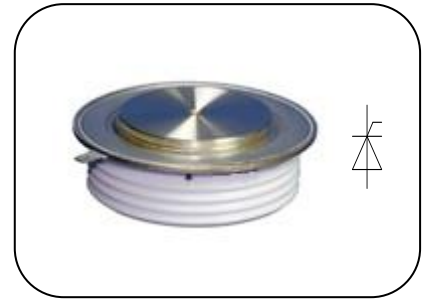
Features

- Interdigitated amplifying gates
- Fast turn-on and high di/dt
- Low switching losses

Typical Applications

- Inductive heating
- Electronic welders
- Self-commutated inverters

$I_{T(AV)}$	1460A
V_{DRM}/V_{RRM}	800~1800V
t_q	18~50μs
I_{TSM}	17kA
I^2t	1445 10³A²S



SYMBOL	CHARACTERISTIC	TEST CONDITIONS		T _j (°C)	VALUE			UNIT
					Min	Type	Max	
$I_{T(AV)}$	Mean on-state current	180° half sine wave 50Hz Double side cooled,	T _C =55°C	125			1460	A
V_{DRM} V_{RRM}	Repetitive peak off-state voltage Repetitive peak reverse voltage	tp=10ms		125	800		1800	V
I_{DRM} I_{RRM}	Repetitive peak current	at V_{DRM} at V_{RRM}		125			100	mA
I_{TSM}	Surge on-state current	10ms half sine wave		125			17	kA
I^2t	I^2t for fusing coordination	$V_R=0.6V_{RRM}$					1445	A ² s*10 ³
V_{TO}	Threshold voltage			125			1.51	V
r_T	On-state slope resistance						0.32	mΩ
V_{TM}	Peak on-state voltage	$I_{TM}=3000A$, $F=26kN$		125			2.47	V
dv/dt	Critical rate of rise of off-state voltage	$V_{DM}=0.67V_{DRM}$		125			500	V/ μ s
di/dt	Critical rate of rise of on-state current	$V_{DM}=67\%V_{DRM}$ to 2000A, Gate pulse $t_r \leq 0.5\mu s$ $I_{GM}=1.5A$		125			1200	A/ μ s
Q_{rr}	Recovery charge	$I_{TM}=1000A$, $t_p=2000\mu s$, $di/dt=-60A/\mu s$, $V_R=50V$		125		750		μC
t _q	Circuit commutated turn-off time	$I_{TM}=1000A$, $t_p=2000\mu s$, $V_R=50V$ $dv/dt=30V/\mu s$, $di/dt=-60A/\mu s$		125	18		50	μs
I_{GT}	Gate trigger current				40		300	mA
V_{GT}	Gate trigger voltage	$V_A=12V$, $I_A=1A$		25	0.9		3.0	V
I_H	Holding current				20		500	mA
V_{GD}	Non-trigger gate voltage	$V_{DM}=67\%V_{DRM}$		125	0.3			V
$R_{th(j-c)}$	Thermal resistance Junction to case	DC· double side cooled					0.018	°C/W
$R_{th(c-h)}$	Thermal resistance case to heat sink	Clamping force 26kN					0.004	
F_m	Mounting force				21		30	kN
T _{stg}	Stored temperature				-40		130	°C
W_t	Weight					590		g
Outline	P12							

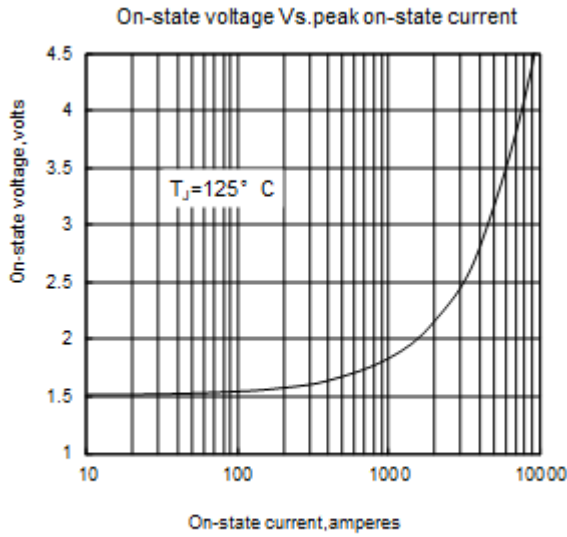


Fig1

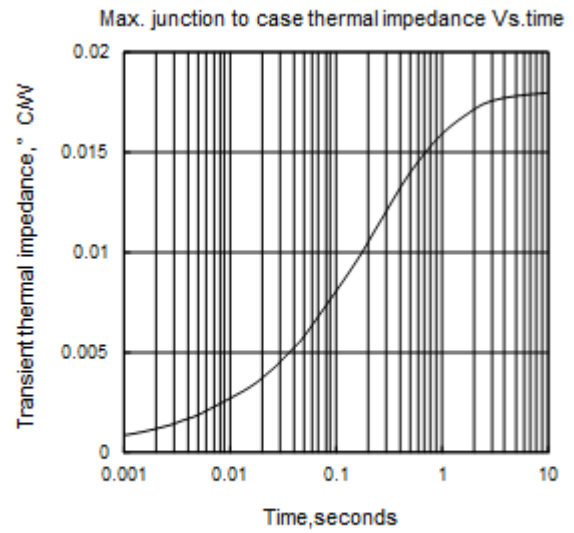


Fig2

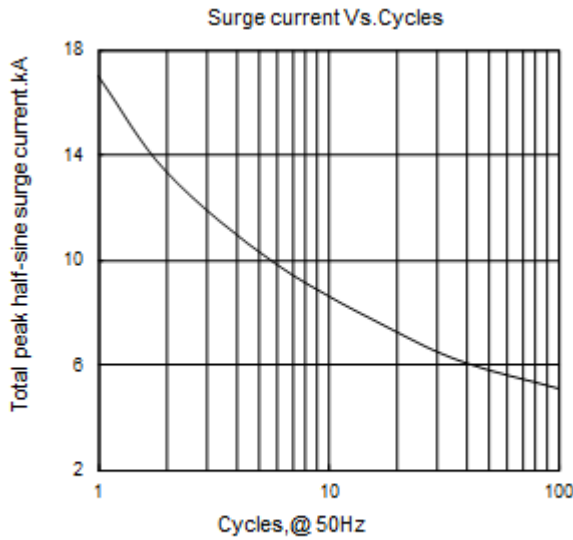


Fig3

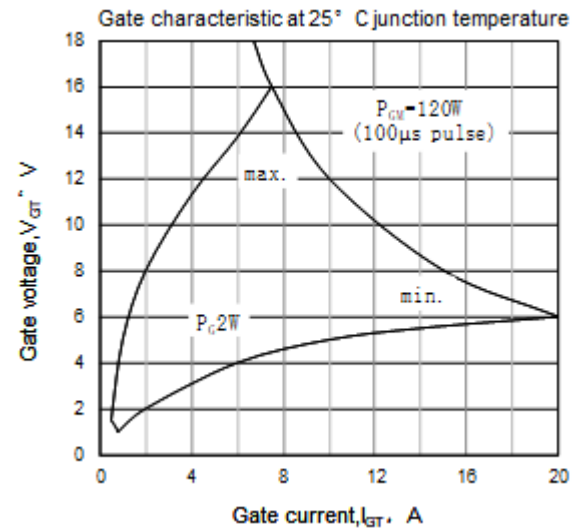


Fig4

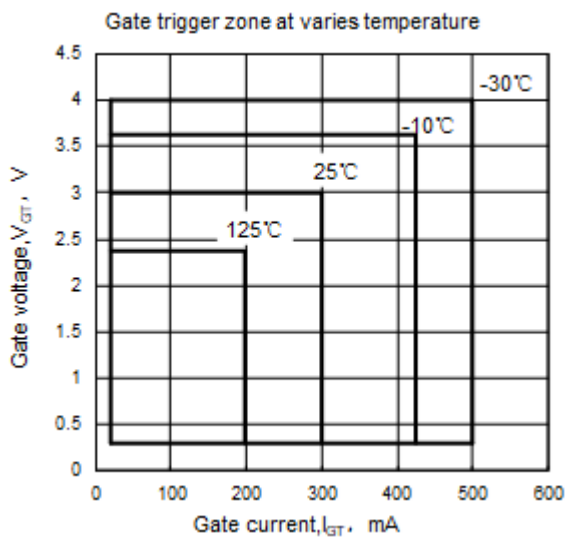
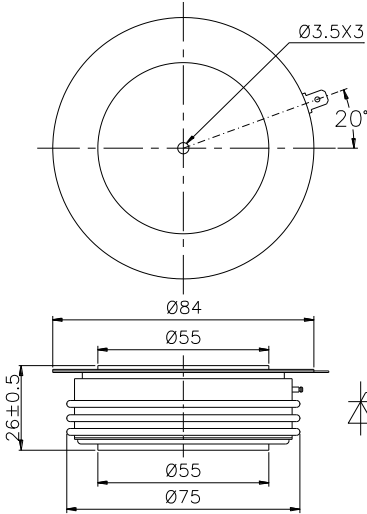


Fig5



Nlps reserves the right to change specifications without notice.